



California Sportfishing Protection Alliance

"An Advocate for Fisheries, Habitat and Water Quality"

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19 April 2012

Mr. Ken Landau, Assistant Executive Officer
Ms. Diana Messina, Supervising WRCE
Mr. Jim Marshall, Sr. WRCE
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6144

VIA: Electronic Submission
Hardcopy if Requested

RE: Consideration of Order Amending Waste Discharge Requirements Order R5-2008-0179
(NPDES No. CA0078590) for Discovery Bay Wastewater Treatment Plant

Dear Messrs. Landau, Marshall and Ms. Messina,

The California Sportfishing Protection Alliance (CSPA) has reviewed the proposed order amending Waste Discharge Requirements (NPDES No. CA0078590) for Discovery Bay Wastewater Treatment Plant (Permit) and submits the following comments.

On 19 March 2012 the Regional Board issued a proposed revision to the town of Discovery Bay's NPDES permit. The Notice of Public Hearing states that interested parties that submitted written comments regarding the 30 September 2010 Tentative Order must submit confirmation that previous comments are still applicable. The California Sportfishing Protection Alliance (CSPA) submitted comments on the September 2010 proposed Permit revision on 31 October 2010; those comments are still applicable. CSPA also submitted a petition of Order No. R5-2008-0179, Waste Discharge Requirements (NPDES No. CA0078590) to the State Water Board for the Town of Discovery Bay Wastewater Treatment Plant on 2 January 2009; that petition is also still applicable. Both our previous comments and our petition of Order No. R5-2008-0179 are incorporated by reference into these comments.

The principal changes in the proposed Permit revision are with regard to the limitation for electrical conductivity (EC) and UV disinfection. Our comments with respect to both items in our previous comment letter and our petition to the State Board are still applicable. Our only additional comments are specifically with regard to the modifications of the EC limitation, as follows:

California Water Code, section 13377, requires that: "Notwithstanding any other provision of this division, the state board and the regional boards shall, as required or authorized by the Federal Water Pollution Control Act, as amended, issue waste discharge and dredged or fill

material permits which apply and ensure compliance with all applicable provisions of the act and acts amendatory thereof or supplementary, thereto, together with any more stringent effluent standards or limitations necessary to implement water quality control plans, or for the protection of beneficial uses, or to prevent nuisance.”

Federal Regulation, 40 CFR 122.4 (a), (d) and (g) require that no permit may be issued when the conditions of the permit do not provide for compliance with the applicable requirements of the CWA, or regulations promulgated under the CWA, when imposition of conditions cannot ensure compliance with applicable water quality requirements and for any discharge inconsistent with a plan or plan amendment approved under Section 208(b) of the CWA.

The proposed Permit has been revised to contain a limitation for EC of 2,100 umhos/cm as an annual average. The EC limitation does not protect the beneficial uses of the receiving stream; specifically:

- In a *Biological Significance* document, dated November 1st 2006, James M. Harrington, Staff Water Quality Biologist with the California Department of Fish and Game, citing McKee and Wolf (1971 Water Quality Criteria) wrote that: “Surveys of inland fresh waters indicates that good mixes of fish fauna are found where conductivity values range between 150 and 500 umhos/cm. Even in the most alkaline waters, the upper tolerance limit for aquatic life is approximately 2000 umhos/cm.” Obviously, as an annual average EC peak concentrations will be significantly higher than the annual average. Freshwater aquatic life is a beneficial use of the receiving stream, which will be degraded by the proposed EC limitation.
- McKee and Wolf also include EC criteria for irrigation water of less than 1,000 umhos/cm for suitability under most conditions. Irrigation is a beneficial use of the receiving stream, which will be degraded by the proposed EC limitation.
- McKee and Wolf also include salinity criteria, listed as TDS, for numerous industrial uses where the recommended levels are far below those limited in the proposed Permit. The proposed Permit did not evaluate the impact on the industrial beneficial use of the receiving stream.

The Regional Board used a steady state analysis to derive the limitations for EC. This methodology utilizes assimilative capacity in the receiving stream; granting a mixing zone. The Central Valley Regional Water Quality Control Board’s Basin Plan, page IV-16.00, requires the Regional Board use EPA’s *Technical Support Document for Water Quality Based Toxics Control (TSD)* in assessing mixing zones. The TSD, page 70, defines a first stage of mixing, close to the point of discharge, where complete mixing is determined by the momentum and buoyancy of the discharge. The second stage is defined by the TSD where the initial momentum and buoyancy of the discharge are diminished and waste is mixed by ambient turbulence. The TSD goes on to state that in large rivers this second stage mixing may extend for miles. The TSD, Section 4.4, requires that if complete mix does not occur in a short distance mixing zone monitoring and modeling must be undertaken. The Regional Board did not conduct a mixing zone analysis for EC and did not comply with the requirements of the Basin Plan or the required TSD.

Thank you for considering these comments. If you have questions or require clarification, please don't hesitate to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Bill Jennings". The signature is fluid and cursive, with the first name "Bill" and last name "Jennings" clearly distinguishable.

Bill Jennings, Executive Director
California Sportfishing Protection Alliance